

CLAIMS:-

1. A composite superconducting tape comprising a multiplicity of constituent superconducting tapes stacked parallel to one another with major faces in contact, and characterised in that at least some of the constituent tapes have widths not greater than half the width of the composite superconductor and are laid edge to edge with each other.
2. A composite superconducting tape as claimed in claim 1 in which all the constituent superconducting tapes have a width that is substantially a simple fraction of the width of the composite tape so that they form two or more substacks with aligned zones between them which contain no superconducting material.
3. A composite superconducting tape as claimed in claim 2 in which the said simple fraction is a half, so that there are two sub-stacks.
4. A composite superconducting tape as claimed in any one of claims 1-3 comprising at least one full-width tape of silver or silver alloy bridging from tape to tape.
5. A composite superconducting tape as claimed in claim 4 in which two full-width metal tapes are present, one at each end of the stack.
6. A composite superconducting tape as claimed in claim 6 in which the two metal tapes are of unequal strength.
7. A composite superconducting tape as claimed in any one of claims 1-7 in which the superconducting tape is diffusion-bonded and all its elongate components extend longitudinally.
8. A composite superconducting tape as claimed in any one of claims 1-8 in which the constituent tapes are all powder-in-tube superconducting tapes.
9. A composite superconducting tape substantially as described with reference to either Figure 1 or Figure 2.